

REMARKS

I. Introduction

With the cancellation herein without prejudice of claim 12, claims 8, 10, and 14 are pending in the present application. In view of the foregoing amendments and the following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

II. Objection to the Drawings

As regards the objection to the drawings, Applicant respectfully maintains that the replacement sheet filed on January 3, 2007 is acceptable. Although Applicant disagrees with the Examiner on this issue, the Specification has been amended herein without prejudice to indicate that Figure 1 illustrates the wall thicknesses of the inflow-side region and the downstream region in a schematic manner and, as such, the wall thicknesses are not drawn to scale.

In view of all of the foregoing, acceptance of the replacement sheet filed on January 3, 2007 and withdrawal of this objection are respectfully requested.

III. Rejection of Claims 8, 10, 12, and 14 Under 35 U.S.C. § 112

Claims 8, 10, 12, and 14 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which the applicant regards as the invention. As an initial matter, claim 12 has been canceled herein without prejudice, thereby rendering moot the present rejection with respect to claim 12.

Claim 8 has been amended herein without prejudice to recite the feature that the inflow-side region of the valve sleeve is formed in one piece with a supply pipe. In this regard, the feature that a supply pipe is inserted into the valve sleeve has been removed from claim 8 herein without prejudice. Claims 10 and 14, which depend from claim 8, do not further recite the supply pipe feature.

In view of the foregoing, withdrawal of this rejection is respectfully submitted.

IV. Rejection of Claims 8, 10, 12, and 14 Under 35 U.S.C. § 102(e)

Claims 8, 10, 12, and 14 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent Application Publication No. 2002/0185555 ("Kobayashi et

al."). It is respectfully submitted that Kobayashi et al. do not anticipate the present claims as amended herein for at least the following reasons.

As an initial matter, claim 12 has been canceled herein without prejudice, thereby rendering moot the present rejection with respect to claim 12.

It is "well settled that the burden of establishing a *prima facie* case of anticipation resides with the [United States] Patent and Trademark Office." *Ex parte Skinner*, 2 U.S.P.Q.2d 1788, 1788 to 1789 (Bd. Pat. App. & Inter. 1986). To anticipate a claim, each and every element as set forth in the claim must be found in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of Calif.*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987).

Claim 8, which relates to a fuel injector, has been amended herein without prejudice to recite that the wall thickness of the valve sleeve decreases in a discharge direction of the fuel *in order to limit noise emissions*. Support for this amendment may be found, for example, at page 4, lines 8 to 9 of the Specification. In this regard, the effect of the specific configuration of varying wall thicknesses of the valve sleeve is that resonances are attenuated so that noise development is dampened without having a negative effect on the stability of the valve sleeve and the saturation behavior of the magnetic field in the region of the working air gap.

Kobayashi et al., which relate to fuel injection valves, describe varying diameters and wall thicknesses for multiple purposes such as, for example, withstanding the pressure applied during injection molding. Kobayashi et al. do not, however, mention limiting noise emissions. In this regard, it is unclear whether the specific arrangement disclosed by Kobayashi et al. has any effect whatsoever on *noise emissions* as opposed to other fuel injector designs.

Claim 8 has been further amended herein without prejudice to recite that the inflow side-region has a *constant radial cross section and wall thickness* extending from the collar to an inflow-side end of the valve sleeve and the discharge-side region has a *constant radial cross section and wall thickness* extending from the collar to a discharge-side end of the valve sleeve. Support for this amendment may be found, for example, at page 4, lines 8 to 13 of the Specification. In this regard, the Specification notes that the wall thickness in the inflow-side region is approximately 0.5 mm and the wall thickness in the discharge-side region — separated from the inflow-side region at a collar — is approximately 0.3 mm. Further support can be found, for example, at Figure 1.

Kobayashi et al. disclose a tubular metal case 2 which has wall thicknesses and radial cross sections that do not remain constant over the various regions. Referring to Figure 4, for example, region B has a wall thickness -b-, while region A has a wall thickness -a- which then decreases to a wall thickness -t- at annular recess 2D. The wall thickness then appears to increase again at region 2B1. The radial cross sections vary across these regions as well. In this regard, Kobayashi et al. do not disclose, or even suggest, a valve sleeve having a constant radial cross section and wall thickness extending from a collar to an inflow-side end of the valve sleeve and a constant radial cross section and wall thickness extending from the collar to a discharge-side end of the valve sleeve.

Claim 8 has been further amended herein without prejudice to recite that the inflow-side region of the valve sleeve is formed in one piece with a supply pipe. This feature is supported by claim 12, which has been canceled herein without prejudice. Further support for this amendment may be found, for example, on page 4, lines 24 to 26 of the Specification.

Kobayashi et al. do not disclose or even suggest a valve sleeve wherein the inflow-side region of the valve sleeve is formed in one piece with a supply pipe. In this regard, what the Office Action refers to as a supply pipe (element 8 of, e.g., Figure 1) is inserted into what the Office Action refers to as valve sleeve (element 2 of, e.g., Figure 1). The Office Action cites Figure 4 as disclosing a supply pipe integrally formed to the inflow-side region a valve sleeve. The Office Action's logic in this regard cannot be understood. Specifically, Figure 4 is simply a sectional view of element 2 of the arrangement of Figure 1, which includes the configuration of elements 2 and 8 that the Office Action cites as disclosing a supply pipe inserted into a valve sleeve. It is thus unclear how element 8 can be simultaneously inserted into and integrally formed with element 2. While Applicant respectfully maintains that Kobayashi et al. do not disclose or even suggest a valve sleeve wherein the inflow-side region of the valve sleeve is formed in one piece with a supply pipe, clarification in this regard is respectfully requested.

Since Kobayashi et al. do not disclose, or even suggest, all of the features recited in claim 8, it is respectfully submitted that Kobayashi et al. do not anticipate claim 8.

Claims 10 and 14 ultimately depend from claim 8 and therefore include all of the features recited in claim 8. It is therefore respectfully submitted that Kobayashi et al. do not anticipate these dependent claims for at least the same reasons set forth above in support of the patentability of claim 8.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

V. Conclusion

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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